


<b>NURSE REPORT</b>	<b>OCCUPATIONAL HEALTH BRANCH DEPARTMENT OF HEALTH SERVICES STATE OF CALIFORNIA</b>
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## **NURSE REPORT #32 NECTARINE PICKER INJURES NECK IN LADDER FALL CDHS(OHB)-FI-94-005-32**

### Summary

A nectarine picker was busy picking in the orchard. When his basket was full he would empty it in a bin on the ground. This meant going up and down the tripod ladder often. A tripod ladder has a single pole on one side which supports a set of ladder steps on the other. When emptying his basket, fruit on the ground would stick to the bottom of his boots.

The nectarine picker started climbing down the ladder to empty his basket. Suddenly, his boot slipped off a step. He began falling when his foot hooked on a step. This flipped him upside down, smashing his head on the ground and bending his neck forward. He hung upside down.

Co-workers released the nectarine picker's foot and lowered him to the ground. Then they moved him so a tractor could pass by. It took one half hour to find their supervisor to get instructions on what to do with the injured worker. Finally, the nectarine picker was loaded into a van and taken to a hospital.

How could this injury have been prevented?

-Work crews should be trained not to move an injured worker, especially one with a possible neck or spinal injury.

-Employers should have written safety programs. These programs can help workers and supervisors identify hazards such as fruit on boot soles.

-Supervisors and workers should call 911 if someone has a severe injury.

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*The NURSE (Nurses Using Rural Sentinel Events) project is conducted by the Occupational Health Branch of the California Department of Health Services, in conjunction with the National Institute for Occupational Safety and Health (#U06/CCU906031-04). The program's goal is to prevent occupational injuries associated with agriculture. Injuries are reported by hospitals, emergency medical services, clinics, medical examiners, and coroners. Selected cases are followed up by conducting interviews of injured workers, co-workers, employers, and others involved in the incident. An on-site safety investigation is also conducted. These investigations provide detailed information on the worker, the work environment, and the potential risk factors resulting in the injury. Each investigation concludes with specific recommendations designed to prevent injuries, for the use of employers, workers, and others concerned about health and safety in agriculture.*

### **BACKGROUND**

On August 31, 1993, NURSE staff identified an injury in a nectarine orchard while reviewing records at a Regional Trauma Center. On August 26, 1993, a nectarine picker's foot slipped as he was climbing down a ladder. As he began falling, his foot hooked on a step which flipped him upside down and left him hanging.

On September 3, 1993, a nurse from the NURSE Project interviewed the injured worker at his home. On October 25, 1993, a safety engineer from the NURSE Project met with the farm labor contractor who employed the worker to discuss the incident. An on-site investigation was not possible because the nectarine orchard was destroyed and replanted soon after the incident. Replanting orchards with younger trees is a routine procedure when fruit trees reach an age at which their productivity decreases. Also, NURSE staff also reviewed the Emergency Medical Services (EMS) ambulance record and hospital medical records.

When meeting with the farm labor contractor, the safety engineer noted he did not have a written injury and illness prevention program, as required by Title 8 California Code of Regulations 3203 -- Injury and Illness Prevention Program. (As of July 1, 1991 the State of California requires all employers to have a written seven point injury prevention program: 1. designated safety person responsible for implementing the program; 2. mode for ensuring employee compliance; 3. hazard communication; 4. hazard evaluation through periodic inspections; 5. injury investigation procedures; 6. intervention process for correcting hazards; and 7. provide safety training and instruction.) However, the farm labor contractor told the safety engineer he trains fruit pickers on-the-job after they are hired, along with monthly refresher training. Yet, the injured nectarine picker told the nurse that he never received safety training.

The nectarine picker worked for this farm labor contractor for the past two summer harvest seasons. This contractor employs approximately 550 workers (300 of whom are seasonal employees working 13-37 weeks per year and 250 are casual employees working 1-12 weeks per year). Farm labor contractors are used by some farm owners and operators of large corporate farms in California to recruit, train, and manage workers.

### **INCIDENT**

On August 26, 1993, at approximately 10:30 a.m., a 21 year-old Hispanic male nectarine picker was working in the orchard picking nectarines. He carried a basket, secured by a strap over his shoulder, to hold the nectarines. He stood on a ten-foot aluminum tripod ladder. A tripod ladder is designed for picking fruit, with a single pole on one side that supports a set of ladder steps on the other.

Rotten fruit stuck in the rubber soles of the nectarine picker's boots. As he began climbing down the ladder sideways, his left foot slipped off a step. The foot caught in the third rung from the top of the

ladder. He fell backwards with his foot still

caught on the ladder step. His neck bent forward as his left shoulder and back of the head hit the ground. He hung upside down.

Working approximately ten feet away, three other nectarine pickers quickly released the injured nectarine picker's foot and lowered him to the ground. The injured worker complained of neck pain. A co-worker ran to get the supervisor at the other end of the orchard. Meanwhile, the injured nectarine picker was moved again to allow a tractor to pass by. After this, he said he could not move and had lost all feeling in his legs and left arm. The supervisor and five co-workers then loaded the injured nectarine picker into a van to take him to a hospital.

They arrived at a local rural hospital at approximately 11:20 a.m. Because of possible neck injuries, fire department paramedics were summoned to remove the injured nectarine picker from the van. They placed a cervical collar around his neck and immobilized him on a spinal board. This was done to prevent any further injury to his neck and spinal cord during transport.

In the emergency department, he was given pain medication and an IV was started. Feeling returned to his legs and arm, and he was able to move them again. X-rays and a CAT scan were taken, yet no injuries were detected. Therefore, the emergency department requested the injured nectarine picker be transferred, via an ambulance, to a Regional Trauma Center.

The injured nectarine picker was admitted to the Regional Trauma Center with probable spinal injuries.

In the Intensive Care Unit (ICU) he was placed in a halo, a device designed to perfectly align the neck and spinal column by immobilizing his head and neck. His progress was monitored daily with x-rays to determine the extent of damage. On August 31, 1993, four days after being admitted, the injured nectarine picker was released with a possible separation of the first and second cervical vertebrae in his neck. The injured nectarine picker contacted the nurse nearly three months after the incident, and stated he is still wearing the halo and is not expected to return to work for several months. **PREVENTION**

### **STRATEGIES**

1. Employers should have an appropriate emergency response plan. This includes work crews being trained to call 911 and to not move an injured worker suspected of having a neck or spinal injury. Also, supervisors and workers should be trained in first aid and cardiopulmonary resuscitation (CPR). If the supervisor and co-workers had been trained in first aid and CPR, they would have known not to move a person with a possible neck or spinal cord injury unless there was immediate danger.<sup>1</sup> They would have also known to immediately call 911. In this incident, the injured worker was moved three times without proper immobilization of his neck. This may have resulted in further damage to his spinal cord beyond the injury sustained in the fall.

2. Field crews should be issued portable communication devices to use in emergencies. In this incident, it took one half hour to locate the supervisor to find out what action should be taken. This resulted in a delay of medical care for the injured worker. If the workers had a cellular telephone or radio they could have quickly contacted him. Also, if 911 had been called using a portable communication device, the injured nectarine picker would have received emergency medical care much faster than he did.

3. The employer should have an implemented written injury and illness prevention program.<sup>2</sup> The farm labor contractor's safety program should have included components on hazard evaluation of specific tasks. In this incident, if the nectarine picker had been trained in ladder safety and how to recognize hazards such as rotten fruit on the soles of shoes, this incident may have been prevented.

1. Title 8 California Code of Regulations 3400(b): "In the absence of an infirmary, clinic or hospital, in near proximity to the workplace...a person or persons shall be adequately trained to render first aid."
2. Title 8 California Code of Regulations 3203: Injury and Illness Prevention Program. See Background section.